|  | Application No.   | Applicant(s)                   |
|--|---|--------------------------------|
| Notice of Allowability   |   |                                |
|  | 10/747,946  | SHIM ET AL.                    |
|  | Examiner  | Art Unit                       |
|  | Thanh T. Nguyen   | 2813                           |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. |   |                                |
| 1. This communication is responsive to 6/28/06.  |   |                                |
| 2.  The allowed claim(s) is/are <u>13,14,18,19 and 22</u> .  |   |                                |
| <ul> <li>3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a)  All b)  Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have been received.</li> </ul>  |   |                                |
| 2. Certified copies of the priority documents have been received in Application No   |   |                                |
| 3. Copies of the certified copies of the priority documents have been received in Application 70.  |   |                                |
| International Bureau (PCT Rule 17.2(a)).   |   |                                |
| * Certified copies not received:   |   |                                |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.   |   |                                |
| 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF<br>INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.  |   |                                |
| 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.   |   |                                |
| (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached   |   |                                |
| 1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date   |   |                                |
| (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of<br>Paper No./Mail Date  |   |                                |
| Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).  |   |                                |
| 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.  |   |                                |
|  |   |                                |
| Attachment(s)  | 6 <b>- 1</b> 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1              | Notice 4 Application (DTO 452) |
| 1. Notice of References Cited (PTO-892)  |   | ratent Application (PTO-152)   |
| 2. Notice of Draftperson's Patent Drawing Review (PTO-948)   | <ol> <li>Interview Summary<br/>Paper No./Mail Date</li> </ol> | (P10-413),<br>te               |
| <ol> <li>Information Disclosure Statements (PTO-1449 or PTO/SB/0<br/>Paper No./Mail Date</li> </ol>  |   |                                |
| Examiner's Comment Regarding Requirement for Deposit of Biological Material  | 8.  Examiner's Statement                                      | ent of Reasons for Allowance   |
|  | 9.  Other   |                                |
|  |   |                                |
|  |   |                                |
|  |   |                                |

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In claim 13, line 18, "polysilicon gat", replace typographical error with "polysilicon gate".

The following is an examiner's statement of reasons for allowance:

Claims 13-14, 18-19, 22 are allowed because none of the prior art alone or in combination teaches or suggests the particular subset of the process steps in etching to remove the hard mask pattern by using HF, wherein HF is generated gasifying a solution of about 39% HF, as the same time that the gas protects a polysilicon gate and a gate oxide, the HF gas is formed through spaying N<sub>2</sub> gas onto the surface of chemical bath containing HF solution, and HF gas on a hot plate at temperature of 50-90°C.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Nguyen whose telephone number is (571) 272-1695, or by Email via address Thanh.Nguyen@uspto.gov. The examiner can normally be reached on Monday-Thursday from 6:00AM to 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead, Jr., can be reached on (571) 272-1702. The fax phone number for this Group is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pairdirect.uspto.gov. Should you have questions on access to thy Private PAIR system, contact the Electronic Business center (EBC) at 866-217-9197 (toll-free).

Thanh Nguyen

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Patent Examiner

Patent Examining Group 2800

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